

| RHIC<br>CABLE NO. | CABLE NO.<br>BY GROUP     | CIRCUIT<br>/VOLTAGE | CABLE<br>TYPE | COND.<br>SIZE | FROM         |             | TO           |         | LENGTH<br>FEET | TRAY<br>SECTION | RACK<br>SLACK | SLEEVE | REMARKS                          |
|-------------------|---------------------------|---------------------|---------------|---------------|--------------|-------------|--------------|---------|----------------|-----------------|---------------|--------|----------------------------------|
|                   |                           |                     |               |               | LOCATION     | DEVICE      | LOCATION     | DEVICE  |                |                 |               |        |                                  |
| 1                 | bi4-cava3.1 smpl 1        | RF                  | FLC-38-50J    |               | tunnel       | bi4-cava3.1 | ctrl rm hlrf | r4act10 | 200            | signal          | 15            |        | acc.cavity b1 pickup #1          |
| 2                 | bi4-cava3.2 smpl 1        | RF                  | FLC-38-50J    |               | tunnel       | bi4-cava3.2 | ctrl rm hlrf | r4act10 | 200            | signal          | 15            |        | acc.cavity b2 pickup #1          |
| 3                 | yo4-cava3.1 smpl 1        | RF                  | FLC-38-50J    |               | tunnel       | yo4-cava3.1 | ctrl rm hlrf | r4act4  | 200            | signal          | 15            |        | acc.cavity y1 pickup #1          |
| 4                 | yo4-cava3.2 smpl 1        | RF                  | FLC-38-50J    |               | tunnel       | yo4-cava3.2 | ctrl rm hlrf | r4act4  | 200            | signal          | 15            |        | acc.cavity y2 pickup #1          |
| 5                 | bi4-cava3.1 smpl 2        | RF                  | FLC-38-50J    |               | tunnel       | bi4-cava3.1 | ctrl rm hlrf | r4act15 | 200            | signal          | 15            |        | acc.cavity b1 pickup #2          |
| 6                 | bi4-cava3.2 smpl 2        | RF                  | FLC-38-50J    |               | tunnel       | bi4-cava3.2 | ctrl rm hlrf | r4act15 | 200            | signal          | 15            |        | acc.cavity b2 pickup #2          |
| 7                 | yo4-cava3.1 smpl 2        | RF                  | FLC-38-50J    |               | tunnel       | yo4-cava3.1 | ctrl rm hlrf | r4act25 | 200            | signal          | 15            |        | acc.cavity y1 pickup #2          |
| 8                 | yo4-cava3.2 smpl 2        | RF                  | FLC-38-50J    |               | tunnel       | yo4-cava3.2 | ctrl rm hlrf | r4act25 | 200            | signal          | 15            |        | acc.cavity y2 pickup #2          |
| 9                 | bi4-cava3.1 grid smpl     | RF                  | FLC-38-50J    |               | tunnel       | bi4-cava3.1 | ctrl rm hlrf | r4act10 | 200            | signal          | 15            |        | acc.cavity b1 grid sample        |
| 10                | bi4-cava3.2 grid smpl     | RF                  | FLC-38-50J    |               | tunnel       | bi4-cava3.2 | ctrl rm hlrf | r4act10 | 200            | signal          | 15            |        | acc.cavity b2 grid sample        |
| 11                | yo4-cava3.1 grid smpl     | RF                  | FLC-38-50J    |               | tunnel       | yo4-cava3.1 | ctrl rm hlrf | r4act4  | 200            | signal          | 15            |        | acc.cavity y1 grid sample        |
| 12                | yo4-cava3.2 grid smpl     | RF                  | FLC-38-50J    |               | tunnel       | yo4-cava3.2 | ctrl rm hlrf | r4act4  | 200            | signal          | 15            |        | acc.cavity y2 grid sample        |
| 13                | bi4-cava3.1 amp smpl      | RF                  | FLC-38-50J    |               | tunnel       | bi4-cava3.1 | ctrl rm hlrf | r4act10 | 200            | signal          | 15            |        | acc.cavity b1 anode sample       |
| 14                | bi4-cava3.2 amp smpl      | RF                  | FLC-38-50J    |               | tunnel       | bi4-cava3.2 | ctrl rm hlrf | r4act10 | 200            | signal          | 15            |        | acc.cavity b2 anode sample       |
| 15                | yo4-cava3.1 amp smpl      | RF                  | FLC-38-50J    |               | tunnel       | yo4-cava3.1 | ctrl rm hlrf | r4act4  | 200            | signal          | 15            |        | acc.cavity y1 anode sample       |
| 16                | yo4-cava3.2 amp smpl      | RF                  | FLC-38-50J    |               | tunnel       | yo4-cava3.2 | ctrl rm hlrf | r4act4  | 200            | signal          | 15            |        | acc.cavity y2 anode sample       |
| 33,17             | bi4-cava3.1 driver        | RF                  | FLC-38-50J    |               | tunnel       | bi4-cava-dr | ps rm        | r4a17   | 250            | signal          | 15            |        | acc.cavity b1 drive              |
| 40,18             | bi4-cava3.2 driver        | RF                  | FLC-38-50J    |               | tunnel       | bi4-cava-dr | ps rm        | r4a16   | 250            | signal          | 15            |        | acc.cavity b2 drive              |
| 49,19             | yo4-cava3.1 driver        | RF                  | FLC-38-50J    |               | tunnel       | yo4-cava-dr | ps rm        | r4a67   | 250            | signal          | 15            |        | acc.cavity y1 drive              |
| 43,20             | yo4-cava3.2 driver        | RF                  | FLC-38-50J    |               | tunnel       | yo4-cava-dr | ps rm        | r4a66   | 250            | signal          | 15            |        | acc.cavity y2 drive              |
| 80,21             | bi4-cava3.1 5w driver     | RF                  | FLC-38-50J    |               | ps rm        | r4a17       | ctr rm hlrf  | r4act15 | 200            | signal          | 15            |        | acc.cavity b1 low level drive    |
| 85,22             | bi4-cava3.2 5w driver     | RF                  | FLC-38-50J    |               | ps rm        | r4a16       | ctr rm hlrf  | r4act15 | 200            | signal          | 15            |        | acc.cavity b2 low level drive    |
| 23                | yo4-cava3.1 5w driver     | RF                  | FLC-38-50J    |               | ps rm        | r4a67       | ctr rm hlrf  | r4act25 | 200            | signal          | 15            |        | acc.cavity y1 low level drive    |
| 24                | yo4-cava3.2 5w driver     | RF                  | FLC-38-50J    |               | ps rm        | r4a66       | ctr rm hlrf  | r4act25 | 200            | signal          | 15            |        | acc.cavity y2 low level drive    |
| 25                | bi4-cava3.1 grid dc       | 400V                | RG-59         |               | tunnel       | bi4-cava3.1 | ps rm        | r4a17   | 250            | HV              | 15            |        | p.a.cavity b1 grid d.c. voltage  |
| 26                | bi4-cava3.2 grid dc       | 400V                | RG-59         |               | tunnel       | bi4-cava3.2 | ps rm        | r4a16   | 250            | HV              | 15            |        | p.a.cavity b2 grid d.c. voltage  |
| 27                | yo4-cava3.1 grid dc       | 400V                | RG-59         |               | tunnel       | yo4-cava3.1 | ps rm        | r4a67   | 250            | HV              | 15            |        | p.a.cavity y1 grid d.c. voltage  |
| 28                | yo4-cava3.2 grid dc       | 400V                | RG-59         |               | tunnel       | yo4-cava3.2 | ps rm        | r4a66   | 250            | HV              | 15            |        | p.a.cavity y2 grid d.c. voltage  |
| 29                | bi4-cava3.1screen dc      | 2kV                 | RG-214        |               | tunnel       | bi4-cava3.1 | ps rm        | r4a17   | 250            | HV              | 15            |        | p.a.cavity b1 screen dc voltage  |
| 30                | bi4-cava3.2screen dc      | 2kV                 | RG-214        |               | tunnel       | bi4-cava3.2 | ps rm        | r4a16   | 250            | HV              | 15            |        | p.a.cavity b2 screen dc voltage  |
| 31                | yo4-cava3.1screen dc      | 2kV                 | RG-214        |               | tunnel       | yo4-cava3.1 | ps rm        | r4a67   | 250            | HV              | 15            |        | p.a.cavity y1 screen dc voltage  |
| 32                | yo4-cava3.2screen dc      | 2kV                 | RG-214        |               | tunnel       | yo4-cava3.2 | ps rm        | r4a66   | 250            | HV              | 15            |        | p.a.cavity y2 screen dc voltage  |
| 33                | bi4-cava3.1anode dc       | 18kV                | RG-219        |               | tunnel       | bi4-cava3.1 | ps rm        | r4a17   | 250            | HV              | 15            |        | p.a.cavity b1 anode dc voltage   |
| 34                | bi4-cava3.2anode dc       | 18kV                | RG-219        |               | tunnel       | bi4-cava3.2 | ps rm        | r4a16   | 250            | HV              | 15            |        | p.a.cavity b2 anode dc voltage   |
| 35                | yo4-cava3.1anode dc       | 18kV                | RG-219        |               | tunnel       | yo4-cava3.1 | ps rm        | r4a67   | 250            | HV              | 15            |        | p.a.cavity y1 anode dc voltage   |
| 36                | yo4-cava3.2anode dc       | 18kV                | RG-219        |               | tunnel       | yo4-cava3.2 | ps rm        | r4a66   | 250            | HV              | 15            |        | p.a.cavity y2 anode dc voltage   |
| 37                | bi4-cava3.1 filament      | 480V ac             | 12/3-THHN     |               | tunnel       | bi4-cava3.1 | ps rm        | r4a17   | 250            | ac              | 15            |        | p.a.cavity b1 filament voltage   |
| 38                | bi4-cava3.2 filament      | 480V ac             | 12/3-THHN     |               | tunnel       | bi4-cava3.2 | ps rm        | r4a16   | 250            | ac              | 15            |        | p.a.cavity b2 filament voltage   |
| 39                | yo4-cava3.1 filament      | 480V ac             | 12/3-THHN     |               | tunnel       | yo4-cava3.1 | ps rm        | r4a67   | 250            | ac              | 15            |        | p.a.cavity y1 filament voltage   |
| 40                | yo4-cava3.2 filament      | 480V ac             | 12/3-THHN     |               | tunnel       | yo4-cava3.2 | ps rm        | r4a66   | 250            | ac              | 15            |        | p.a.cavity y2 blower             |
| 41                | bi4-cava3.1 blower        | 120V ac             | 12/3-THHN     |               | tunnel       | bi4-cava3.1 | ps rm        | r4a17   | 250            | ac              | 15            |        | p.a.cavity b1 blower             |
| 42                | bi4-cava3.2 blower        | 120V ac             | 12/3-THHN     |               | tunnel       | bi4-cava3.2 | ps rm        | r4a16   | 250            | ac              | 15            |        | p.a.cavity b2 blower             |
| 43                | yo4-cava3.1 blower        | 120V ac             | 12/3-THHN     |               | tunnel       | yo4-cava3.1 | ps rm        | r4a67   | 250            | ac              | 15            |        | p.a.cavity y1 blower             |
| 44                | yo4-cava3.2 blower        | 120V ac             | 12/3-THHN     |               | tunnel       | yo4-cava3.2 | ps rm        | r4a66   | 250            | ac              | 15            |        | p.a.cavity y2 blower             |
| 45                | bi4-cava3.1 driver dc     | 50V dc              | 10/4-THHN     |               | tunnel       | bi4-cava3.1 | ps rm        | r4a17   | 250            | signal          | 15            |        | driver cavity b1 dc supply       |
| 46                | bi4-cava3.2 driver dc     | 50V dc              | 10/4-THHN     |               | tunnel       | bi4-cava3.2 | ps rm        | r4a16   | 250            | signal          | 15            |        | driver cavity b2 dc supply       |
| 47                | yo4-cava3.1 driver dc     | 50V dc              | 10/4-THHN     |               | tunnel       | yo4-cava3.1 | ps rm        | r4a67   | 250            | signal          | 15            |        | driver cavity y1 dc supply       |
| 48                | yo4-cava3.2 driver dc     | 50V dc              | 10/4-THHN     |               | tunnel       | yo4-cava3.2 | ps rm        | r4a66   | 250            | signal          | 15            |        | driver cavity y2 dc supply       |
| 49                | bi4-cava3.1 tuner         | signal              | 26pair#22PLTC |               | tunnel       | bi4-cava-dr | ps rm        | r4a17   | 250            | signal          | 15            |        | tuner cavity b1 signal           |
| 50                | bi4-cava3.2 tuner         | signal              | 26pair#22PLTC |               | tunnel       | bi4-cava-dr | ps rm        | r4a16   | 250            | signal          | 15            |        | tuner cavity b2 signal           |
| 51                | yo4-cava3.1 tuner         | signal              | 26pair#22PLTC |               | tunnel       | yo4-cava-dr | ps rm        | r4a67   | 250            | signal          | 15            |        | tuner cavity y1 signal           |
| 52                | yo4-cava3.2 tuner         | signal              | 26pair#22PLTC |               | tunnel       | yo4-cava-dr | ps rm        | r4a66   | 250            | signal          | 15            |        | tuner cavity y2 signal           |
| 53                | bi4-cava3.1 pa&driver     | signal              | 26pair#22PLTC |               | tunnel       | bi4-cava-dr | ps rm        | r4a17   | 250            | signal          | 15            |        | pa&driver cavity b1 intlk.       |
| 54                | bi4-cava3.2 pa&driver     | signal              | 26pair#22PLTC |               | tunnel       | bi4-cava-dr | ps rm        | r4a16   | 250            | signal          | 15            |        | pa&driver cavity b2 intlk.       |
| 55                | yo4-cava3.1 pa&driver     | signal              | 26pair#22PLTC |               | tunnel       | yo4-cava-dr | ps rm        | r4a67   | 250            | signal          | 15            |        | pa&driver cavity y1 intlk.       |
| 56                | yo4-cava3.2 pa&driver     | signal              | 26pair#22PLTC |               | tunnel       | yo4-cava-dr | ps rm        | r4a66   | 250            | signal          | 15            |        | pa&driver cavity y2 intlk.       |
| 57                | bi4-cava3.1 NIM to ps     | signal              | 26pair#22PLTC |               | ctrl rm hlrf | r4act10     | ps rm        | r4a17   | 150            | signal          | 15            |        | d.c.sign.cavity b1 for nim crate |
| 58                | bi4-cava3.2 NIM to ps     | signal              | 26pair#22PLTC |               | ctrl rm hlrf | r4act10     | ps rm        | r4a16   | 150            | signal          | 15            |        | dc sign cavity b2 for nim crate  |
| 59                | yo4-cava3.1NIM to ps      | signal              | 26pair#22PLTC |               | ctrl rm hlrf | r4act4      | ps rm        | r4a67   | 150            | signal          | 15            |        | dc sign cavity y1 for NIM crate  |
| 60                | yo4-cava3.2NIM to ps      | signal              | 26pair#22PLTC |               | ctrl rm hlrf | r4act4      | ps rm        | r4a66   | 150            | signal          | 15            |        | dc sign cavity y2 for NIM crate  |
| 300               | bi4-cava3.1 driver dc     | 50V dc              | 2/4-THHN      |               | tunnel       | bi4-cava3.1 | ps rm        | r4a17   | 250            | signal          | 15            |        | driver cavity b1 dc supply       |
| 301               | bi4-cava3.2 driver dc     | 50V dc              | 2/4-THHN      |               | tunnel       | bi4-cava3.2 | ps rm        | r4a16   | 250            | signal          | 15            |        | driver cavity b2 dc supply       |
| 302               | yo4-cava3.1 driver dc     | 50V dc              | 2/4-THHN      |               | tunnel       | yo4-cava3.1 | ps rm        | r4a67   | 250            | signal          | 15            |        | driver cavity y1 dc supply       |
| 303               | yo4-cava3.2 driver dc     | 50V dc              | 2/4-THHN      |               | tunnel       | yo4-cava3.2 | ps rm        | r4a66   | 250            | signal          | 15            |        | driver cavity y2 dc supply       |
| 304               | analog vacuum guage       | signal              | 37cond#18     | 1004B         | r4b15        | ps rm       | junct box A  | 600     | signal         | 15              |               |        | analog vacuum guage signals      |
| 305               | digital setpoints for vac | signal              | 37cond#18     | 1004B         | r4b16        | ps rm       | junct box B  | 600     | signal         | 15              |               |        | digital setpoints for vacuum     |
| 306               | bi4-cava3.1 analog vac    | signal              | 2cond#18      |               | ps rm        | junct box A | ctrl rm hlrf | r4act10 | 125            | signal          | 15            |        | bi4-cava3.1 analog vac           |
| 307               | bi4-cava3.2 analog vac    | signal              | 2cond#18      |               | ps rm        | junct box A | ctrl rm hlrf | r4act10 | 125            | signal          | 15            |        | bi4-cava3.2 analog vac           |
| 308               | yo4-cava3.1 analog vac    | signal              | 2cond#18      |               | ps rm        | junct box A | ctrl rm hlrf | r4act4  | 125            | signal          | 15            |        | yo4-cava3.1 analog vac           |
| 309               | yo4-cava3.2 analog vac    | signal              | 2cond#18      |               | ps rm        | junct box A | ctrl rm hlrf | r4act4  | 125            | signal          | 15            |        | yo4-cava3.2 analog vac           |
| 310               | bi4-cava3.1 dig vac       | signal              | 2cond#18      |               | ps rm        | junct box B | ps rm        | r4a17   | 125            | signal          | 15            |        | bi4-cava3.1 analog vac           |
| 311               | bi4-cava3.2 dig vac       | signal              | 2cond#18      |               | ps rm        | junct box B | ps rm        | r4a16   | 125            | signal          | 15            |        | bi4-cava3.2 analog vac           |
| 312               | yo4-cava3.1 dig vac       | signal              | 2cond#18      |               | ps rm        | junct box B | ps rm        | r4a67   | 125            | signal          | 15            |        | yo4-cava3.1 analog vac           |
| 313               | yo4-cava3.2 dig vac       | signal              | 2cond#18      |               | ps rm        | junct box B | ps rm        | r4a66   | 125            | signal          | 15            |        | yo4-cava3.2 analog vac           |

## CABLES FOR 28MHz SYSTEMS

|      |                         |        |            |  |         |             |             |             |     |        |    |  |                         |
|------|-------------------------|--------|------------|--|---------|-------------|-------------|-------------|-----|--------|----|--|-------------------------|
| 1000 | yo4-cava3.1 drv to pa   | signal | FLC-58-50J |  | tunnel  | yo4-cava-dr | tunnel      | yo4-cava3.1 | 50  | signal | 15 |  | 1 KW Driver to PA       |
| 1001 | yo4-cava3.2 drv to pa   | signal | FLC-58-50J |  | tunnel  | yo4-cava-dr | tunnel      | yo4-cava3.2 | 50  | signal | 15 |  | 1 KW Driver to PA       |
| 1002 | bi4-cava3.1 drv to pa   | signal | FLC-58-50J |  | tunnel  | bi4-cava-dr | tunnel      | bi4-cava3.1 | 50  | signal | 15 |  | 1 KW Driver to PA       |
| 1003 | bi4-cava3.2 drv to pa   | signal | FLC-58-50J |  | tunnel  | bi4-cava-dr | tunnel      | bi4-cava3.2 | 50  | signal | 15 |  | 1 KW Driver to PA       |
| 1004 | yo4-cava3.1 drv to pa   | signal | FLC-58-50J |  | tunnel  | yo4-cava-dr | tunnel      | yo4-cava3.1 | 50  | signal | 15 |  | Cav P/U to Sum Junct    |
| 1005 | yo4-cava3.2 drv to pa   | signal | FLC-58-50J |  | tunnel  | yo4-cava-dr | tunnel      | yo4-cava3.2 | 50  | signal | 15 |  | Cav P/U to Sum Junct    |
| 1006 | bi4-cava3.1 drv to pa   | signal | FLC-58-50J |  | tunnel  | bi4-cava-dr | tunnel      | bi4-cava3.1 | 50  | signal | 15 |  | Cav P/U to Sum Junct    |
| 1007 | bi4-cava3.2 drv to pa   | signal | FLC-58-50J |  | tunnel  | bi4-cava-dr | tunnel      | bi4-cava3.2 | 50  | signal | 15 |  | Cav P/U to Sum Junct    |
| 1008 | yo4-cava3.1 5w fwd to   | signal | FLC-58-50J |  | ps room | r4a67b      | ctr rm hlrf | r4act4      | 150 | signal | 15 |  | 5W Driver FWD to RF Box |
| 1009 | yo4-cava3.2 5w fwd to   | signal | FLC-58-50J |  | ps room | r4a66b      | ctr rm hlrf | r4act4      | 150 | signal | 15 |  | 5W Driver FWD to RF Box |
| 1010 | bi4-cava3.1 5w fwd to r | signal | FLC-58-50J |  | ps room | r4a17b      | ctr rm hlrf | r4act10     | 150 | signal | 15 |  | 5W Driver FWD to RF Box |
| 1011 | bi4-cava3.2 5w fwd to r | signal | FLC-58-50J |  | ps room | r4a16b      | ctr rm hlrf | r4act10     | 150 | signal | 15 |  | 5W Driver FWD to RF Box |
| 1012 | yo4-cava3.1 kw fwd      | signal | FLC-58-50J |  | tunnel  | yo4-cava-dr | ctr rm hlrf | r4act4      | 200 | signal | 15 |  | 1 KW FWD to RF Box      |
| 1013 | yo4-cava3.1 kw rev      | signal | FLC-58-50J |  | tunnel  | yo4-cava-dr | ctr rm hlrf | r4act4      | 200 | signal | 15 |  | 1 KW REV to RF Box      |
| 1014 | yo4-cava3.2 kw fwd      | signal | FLC-58-50J |  | tunnel  | yo4-cava-dr | ctr rm hlrf | r4act4      | 200 | signal | 15 |  | 1 KW FWD to RF Box      |
| 1015 | yo4-cava3.2 kw rev      | signal | FLC-58-50J |  | tunnel  | yo4-cava-dr | ctr rm hlrf | r4act4      | 200 | signal | 15 |  | 1 KW REV to RF Box      |
| 1016 | bi4-cava3.1 kw fwd      | signal | FLC-58-50J |  | tunnel  | bi4-cava-dr | ctr rm hlrf | r4act10     | 200 | signal | 15 |  | 1 KW FWD to RF Box      |
| 1017 | bi4-cava3.1 kw rev      | signal | FLC-58-50J |  | tunnel  | bi4-cava-dr | ctr rm hlrf | r4act10     | 200 | signal | 15 |  | 1 KW REV to RF Box      |
| 1018 | bi4-cava3.2 kw fwd      | signal | FLC-58-50J |  | tunnel  | bi4-cava-dr | ctr rm hlrf | r4act10     | 200 | signal | 15 |  | 1 KW FWD to RF Box      |
| 1019 | bi4-cava3.2 kw rev      | signal | FLC-58-50J |  | tunnel  | bi4-cava-dr | ctr rm hlrf | r4act10     | 200 | signal | 15 |  | 1 KW REV to RF Box      |
| 1020 | yo4-cava-dr patch a     | signal | FLC-58-50J |  | tunnel  | yo4-cava-dr | ctr rm hlrf | r4act5      | 200 | signal | 15 |  | driver to patch a       |
| 1021 | yo4-cava-dr patch b     | signal | FLC-58-50J |  | tunnel  | yo4-cava-dr | ctr rm hlrf | r4act5      | 200 | signal | 15 |  | driver to patch b       |
| 1022 | yo4-cava-dr patch c     | signal | FLC-58-50J |  | tunnel  | yo4-cava-dr | ctr rm hlrf | r4act5      | 200 | signal | 15 |  | driver to patch c       |
| 1023 | yo4-cava-dr patch d     | signal | FLC-58-50J |  | tunnel  | yo4-cava-dr | ctr rm hlrf | r4act5      | 200 | signal | 15 |  | driver to patch d       |
| 1024 | bi4-cava-dr patch a     | signal | FLC-58-50J |  | tunnel  | bi4-cava-dr | ctr rm hlrf | r4act9      | 200 | signal |    |  |                         |